

## **§ 193.2709**

(1) Successful completion of the training required by §§193.2713 and 193.2717; and

(2) Experience related to the assigned operation or maintenance function; and

(3) Acceptable performance on a proficiency test relevant to the assigned function.

(b) A person who does not meet the requirements of paragraph (a) of this section may operate or maintain a component when accompanied and directed by an individual who meets the requirements.

(c) Corrosion control procedures under §193.2605(b), including those for the design, installation, operation, and maintenance of cathodic protection systems, must be carried out by, or under the direction of, a person qualified by experience and training in corrosion control technology.

### **§ 193.2709 Security.**

Personnel having security duties must be qualified to perform their assigned duties by successful completion of the training required under §193.2715.

### **§ 193.2711 Personnel health.**

Each operator shall follow a written plan to verify that personnel assigned operating, maintenance, security, or fire protection duties at the LNG plant do not have any physical condition that would impair performance of their assigned duties. The plan must be designed to detect both readily observable disorders, such as physical handicaps or injury, and conditions requiring professional examination for discovery.

### **§ 193.2713 Training: operations and maintenance.**

(a) Each operator shall provide and implement a written plan of initial training to instruct—

(1) All permanent maintenance, operating, and supervisory personnel—

(i) About the characteristics and hazards of LNG and other flammable fluids used or handled at the facility, including, with regard to LNG, low temperatures, flammability of mixtures with air, odorless vapor, boiloff characteristics, and reaction to water and water spray;

## **49 CFR Ch. I (10–1–02 Edition)**

(ii) About the potential hazards involved in operating and maintenance activities; and

(iii) To carry out aspects of the operating and maintenance procedures under §§193.2503 and 193.2605 that relate to their assigned functions; and

(2) All personnel—

(i) To carry out the emergency procedures under §193.2509 that relate to their assigned functions; and

(ii) To give first-aid; and

(3) All operating and appropriate supervisory personnel—

(i) To understand detailed instructions on the facility operations, including controls, functions, and operating procedures; and

(ii) To understand the LNG transfer procedures provided under §193.2513.

(b) A written plan of continuing instruction must be conducted at intervals of not more than two years to keep all personnel current on the knowledge and skills they gained in the program of initial instruction.

### **§ 193.2715 Training: security.**

(a) Personnel responsible for security at an LNG plant must be trained in accordance with a written plan of initial instruction to:

(1) Recognize breaches of security;

(2) Carry out the security procedures under §193.2903 that relate to their assigned duties;

(3) Be familiar with basic plant operations and emergency procedures, as necessary to effectively perform their assigned duties; and

(4) Recognize conditions where security assistance is needed.

(b) A written plan of continuing instruction must be conducted at intervals of not more than two years to keep all personnel having security duties current on the knowledge and skills they gained in the program of initial instruction.

### **§ 193.2717 Training: fire protection.**

(a) All personnel involved in maintenance and operations of an LNG plant, including their immediate supervisors, must be trained in accordance with a written plan of initial instruction, including plant fire drills, to:

(1) Know and follow the fire prevention procedures under §193.2805(b);

(2) Know the potential causes and areas of fire determined under § 193.2805(a);

(3) Know the types, sizes, and predictable consequences of fire determined under § 193.2817(a); and

(4) Know and be able to perform their assigned fire control duties according to the procedures established under § 193.2509 and by proper use of equipment provided under § 193.2817.

(b) A written plan of continuing instruction, including plant fire drills, must be conducted at intervals of not more than two years to keep personnel current on the knowledge and skills they gained in the instruction under paragraph (a) of the section.

#### § 193.2719 Training: records.

(a) Each operator shall maintain a system of records which—

(1) Provide evidence that the training programs required by this subpart have been implemented; and

(2) Provide evidence that personnel have undergone and satisfactorily completed the required training programs.

(b) Records must be maintained for one year after personnel are no longer assigned duties at the LNG plant.

### Subpart I—Fire Protection

SOURCE: Amdt. 193-2, 45 FR 70408, Oct. 23, 1980, unless otherwise noted.

#### § 193.2801 Scope.

Each LNG facility must meet fire prevention and fire control provisions of ANSI/NFPA 59A.

[Amdt. 193-17, 65 FR 10960, Mar. 1, 2000]

#### § § 193.2803–193.2821 [Reserved]

### Subpart J—Security

SOURCE: Amdt. 193-2, 45 FR 70409, Oct. 23, 1980, unless otherwise noted.

#### § 193.2901 Scope.

This subpart prescribes requirements for security at LNG plants. However, the requirements do not apply to existing LNG plants that do not contain LNG.

[Amdt. 193-4, 52 FR 675, Jan. 8, 1987]

#### § 193.2903 Security procedures.

Each operator shall prepare and follow one or more manuals of written procedures to provide security for each LNG plant. The procedures must be available at the plant in accordance with § 193.2017 and include at least:

(a) A description and schedule of security inspections and patrols performed in accordance with § 193.2913;

(b) A list of security personnel positions or responsibilities utilized at the LNG plant;

(c) A brief description of the duties associated with each security personnel position or responsibility;

(d) Instructions for actions to be taken, including notification of other appropriate plant personnel and law enforcement officials, when there is any indication of an actual or attempted breach of security;

(e) Methods for determining which persons are allowed access to the LNG plant;

(f) Positive identification of all persons entering the plant and on the plant, including methods at least as effective as picture badges; and

(g) Liaison with local law enforcement officials to keep them informed about current security procedures under this section.

#### § 193.2905 Protective enclosures.

(a) The following facilities must be surrounded by a protective enclosure:

(1) Storage tanks;

(2) Impounding systems;

(3) Vapor barriers;

(4) Cargo transfer systems;

(5) Process, liquefaction, and vaporization equipment;

(6) Control rooms and stations;

(7) Control systems;

(8) Fire control equipment;

(9) Security communications systems; and

(10) Alternative power sources.

The protective enclosure may be one or more separate enclosures surrounding a single facility or multiple facilities.

(b) Ground elevations outside a protective enclosure must be graded in a manner that does not impair the effectiveness of the enclosure.